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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,591	12/11/2003	David C. Challener	RPS920030250US1	8211
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LENOVO (US) IP Law 1009 Think Place Building One, 4th Floor 4B6 Morrisville, NC 27560			EXAMINER LIU, LIN	
			ART UNIT 2145	PAPER NUMBER
			MAIL DATE 09/20/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/733,591	Applicant(s) CHALLENGER ET AL.	
	Examiner Lin Liu	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is responsive to communications filed on 12/11/2003.

Claims 1-14 are pending and have been examined.

Specification

2. The disclosure is objected to because of the following informalities: from the illustration of fig. 1 and page 6, lines 14-16, examiner believes that the "first client computer system 100a is coupled to a private network 110 such as a Local Area Network (LAN). A second client computer system 100b is coupled to a public network 120, such as the Internet."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "assigning a weight" recited in claims 1 and 7 is a relative term, which renders the claims indefinite. The term "weight" is unclear and vague as what applicant refers it as. All the dependent claims are rejected for the same rationale.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. **Claims 1-14** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of copending **Application No. 10/733,055** in view of **Miller (Patent no.: US 6,742,141 B1)**.

7. The claims of application no.: 10/733,055 does not explicitly disclose the additional limitations: engaging a customer in an engagement relationship, identifying characteristics of a customer's system, establishing requirements for customer's system in view of said engagement relationship and a method of informing the customer of the solution.

8. However, Miller discloses engaging a customer in an engagement relationship (Miller, figures 1 and 2, col. 8, lines 1-30, noted that the client-server relationship,

wherein the client is the customer), identifying characteristics of a customer's system (Miller, fig. 2, col. 8, lines 19-30), establishing requirements for customer's system in view of said engagement relationship (Miller, fig. 2, col. 8, lines 19-30) and a method of informing the customer of the solution (Miller, figures 12, and col. 15, lines 5-28).

9. Therefore, it would be have been obvious to one of ordinary skill in the art at the time of invention was to made to modify the claims of application no.: 10/733,055 to include the additional obvious features taught by Miller in order to for the customer/client to subscribe to the automated support network in diagnosing and repairing the network issues using the local and remote knowledgebase (Miller, fig. 1-2, col. 8, lines 1-39).

This is a provisional obviousness-type double patenting rejection.

Claims 1, 4 and 5 of present application	Claims 1, 2, 4, 5 and 8 of application: 10/733,055
Claim 1. A method for establishing a network connection between a client system and a network comprising: engaging a customer in an engagement relationship, identifying characteristics of a customer's system, establishing requirements for customer's system in view of said engagement relationship, collecting real time connectivity	Claim 1. A computer readable medium containing program instructions for establishing a connection between a client system and a network, the program instructions for: (a) collecting real time connectivity information by the client system, wherein the collecting instruction (a) further includes: (a1) monitoring and collecting network traffic in real time;

<p>information by said customer's system, including</p> <p>monitoring and collecting network traffic of said customer's system in real time,</p> <p>assigning a weight to the real time network traffic based on popularity, and creating a weighted list from the weighted real time network traffic,</p> <p>utilizing the real time connectivity information by said customer's system to establish a connection with the network, including</p> <p>detecting a failed connection, determining a cause of the failed connection by the customer's system, and generating a solution based on the cause and the real time connectivity information,</p> <p>Claim 4. The method of claim 1, further</p>	<p>(a2)assigning a weight to the real time network traffic based on popularity; and (a3)creating a weighted list from the weighted real time network traffic; and (b) utilizing the real time connectivity information by the client system to establish a connection with the network.</p> <p>Claim 8. The computer readable medium of claim 1, wherein the utilizing instruction (b) includes:</p> <p>(b1) detecting a failed connection; (b2) determining a cause of the failed connection by the client system; (b3) generating a solution based on the cause and the real time connectivity information; and (b4) implementing the solution.</p> <p>Claims 2. The computer readable medium of claim 1 further comprising:</p> <p>(c) utilizing data from a local persistent knowledgebase to establish a connection to</p>
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comprising informing the customer of the solution. Claim 5. The method of claim 4, further comprising implementing the solution. utilizing data from a customer's local persistent knowledgebase or server to establish a connection to the network, and, storing said weighted list in the customer's system.	the network Claim 4. Canceled Claim 5. The computer readable medium of claim 4 further comprising the instruction for: (c) storing the weighted list in the client system.
This applies substantially the same to claims 8-14	

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. **Claims 1-14** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of **U.S. Patent No. 7,181,653** in view of **Miller (Patent no.: US 6,742,141 B1)**.

12. The claims of U.S. Patent No. 7,181,653 does not explicitly disclose the additional limitations: engaging a customer in an engagement relationship, identifying characteristics of a customer's system, establishing requirements for customer's system in view of said engagement relationship and a method of informing the customer of the solution.

13. However, Miller discloses engaging a customer in an engagement relationship (Miller, figures 1 and 2, col. 8, lines 1-30, noted that the client-server relationship, wherein the client is the customer), identifying characteristics of a customer's system (Miller, fig. 2, col. 8, lines 19-30), establishing requirements for customer's system in view of said engagement relationship (Miller, fig. 2, col. 8, lines 19-30) and a method of informing the customer of the solution (Miller, figures 12, and col. 15, lines 5-28).

14. Therefore, it would be have been obvious to one of ordinary skill in the art at the time of invention was to made to modify the claims of application no.: 10/733,055 to include the additional obvious features taught by Miller in order to for the customer/client to subscribe to the automated support network in diagnosing and repairing the network issues using the local and remote knowledgebase (Miller, fig. 1-2, col. 8, lines 1-39).

Claims 1, 4-7 of present application	Claim 1 of USPN: 7,181,653
Claim 1. A method for establishing a network connection between a client	Claim 1. A method for establishing a network connection between a client

system and a network comprising:

**engaging a customer in an
engagement relationship,**

**identifying characteristics of a
customer's system,**

**establishing requirements for
customer's system in view of said
engagement relationship,**

collecting real time connectivity
information by said customer's system,
including

monitoring and collecting network
traffic of said customer's system in real
time,

Claim 7. The method of claim 6, wherein
further comprising analyzing the real time
connectivity information to determine a
range of IP addresses assigned by a
DHCP server, generating a plurality of IP
addresses within the range, selecting one
of the plurality of IP addresses and
determining whether it is in use and

system and a network comprising:

(a) collecting real time connectivity
information by the client system, wherein
collecting real time connectivity
information includes

(a1) monitoring and collecting network
traffic in real time through an adapter not
yet enabled to communicate with the
network wherein the network traffic
comprises addresses recently assigned
by a DHCP server and addresses and
names of SOCKS servers;

(a2) assigning a weight to the real time
network
traffic based on utilization;

(a3) creating a weighted list from the
weighted

real time network traffic;

(b) utilizing the real time connectivity
information collected by the client system
and data from a local persistent
knowledgebase to establish a connection

assigning the one IP address to said customer's system if the one IP address is not in use.

assigning a weight to the real time network traffic based on popularity, and

creating a weighted list from the weighted real time network traffic,

utilizing data from a customer's local persistent knowledgebase or server to establish a connection to the network, and,

utilizing the real time connectivity information by said customer's system to establish a connection with the network, including detecting a failed connection, determining a cause of the failed connection by the customer's system, and

Claim 6. The method of claim 1, further comprising

analyzing at least one error message associated with the failed connection and

auditing a plurality of communication devices to determine which of the plurality

with the network by

(b1) detecting a failed connection;

(b2) determining a cause of the failed connection by the client system by analyzing at least one more message associated with the failed connection and auditing a plurality of communication devices in the client to determine which of the plurality of communication devices is a potential candidate for connectivity;

(b3) generating a solution based on the cause and the real time connectivity information; and

(b4) implementing the solution.

of communication devices is a potential candidate for connectivity. generating a solution based on the cause and the real time connectivity information, Claim 4. The method of claim 1, further comprising informing the customer of the solution. Claim 5. The method of claim 4, further comprising implementing the solution.	
This applies substantially the same to claims 8-14	

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 1-6 and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Miller (Patent no.: US 6,742,141 B1)** in view of **Kramer et al. (Patent no.: US 7,096,210 B1)**.

With respect to **claim 1**, Miller teaches a method for establishing a network connection between a client system and a network comprising:

engaging a customer in an engagement relationship (Miller, figures 1 and 2, col. 8, lines 1-30, noted that the client-server relationship, wherein the client is the customer),

identifying characteristics of a customer's system (Miller, fig. 2, col. 8, lines 19-30),

establishing requirements for customer's system in view of said engagement relationship (Miller, fig. 2, col. 8, lines 19-30),

collecting real time connectivity information by said customer's system, including monitoring and collecting network traffic of said customer's system in real time (Miller, col. 9, lines 53-64);

assigning a weight to the real time network traffic based on popularity (Miller, col. 10, lines 35-45, noted that from the data collected the severity level of network connectivity problem is assigned),

utilizing the real time connectivity information by said customer's system to establish a connection with the network (Miller, col. 9, lines 62-64 and col. 11, lines 2-14), including detecting a failed connection, determining a cause of the failed connection by the customer's system (Miller, fig. 10 and col. 13, lines 39-61), and generating a solution based on the cause and the real time connectivity information (Miller, fig. 10 and col. 13, lines 39-61, noted that a solution is loaded),

utilizing data from a customer's local persistent knowledgebase or server to establish a connection to the network (Miller, fig. 7, col. 10 line 59 to col. 11 line 21), and,

storing said weighted network traffic in the customer's system (Miller, col. 9, lines 53-64).

Miller also teaches a method of providing list for customer knowledge base (Miller, fig. 6). However, Miller fails to teach a method of providing a severity list of the problem collected.

In the same field of endeavor, Kramer teaches a method of providing a severity list of the problem collected (Kramer, col. 27, lines 31-34).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of providing a severity list of the problem collected as taught by Kramer in Miller's invention of the customer's knowledgebase with the advantage being that it would be easier to identify how serious the problem is and effectively execute the best solution to the problem.

With respect to **claim 2**, Miller teaches the method of claim 1, wherein the local persistent knowledgebase is stored in the client system (Miller, fig. 5, and col. 9, lines 2-19).

With respect to **claim 3**, Miller teaches the method of claim 1 further comprising: utilizing a set of local rules to establish a connection to the network (Miller, fig. 7, col. 10 line 59 to col. 11 line 21).

With respect to **claim 4**, Miller teaches the method of claim 1, further comprising informing the customer of the solution (Miller, figures 12, and col. 15, lines 5-28).

With respect to **claim 5**, Miller teaches the method of claim 4, further comprising implementing the solution (Miller, fig. 10, col. 13, lines 39-61, noted executing the solution).

With respect to **claim 6**, Miller teaches the method of claim 1, further comprising analyzing at least one error message associated with the failed connection (Miller, fig. 8B and col. 14, lines 7-14) and auditing a plurality of communication devices to determine which of the plurality of communication devices is a potential candidate for connectivity (Miller, col. 14, lines 9-41).

In regard to **claims 8-13**, the limitations of this claim are substantially the same as those in claims 1-7, but rather in a computer instruction stored on a computer readable medium form. Therefore the same rationale for rejecting claims 1-7 is used to reject claim 8-13. By this rationale **claims 8-13** is rejected.

17. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Miller (Patent no.: US 6,742,141 B1)** in view of **Kramer et al. (Patent no.: US 7,096,210 B1)** and further in view of **Farrow et al. (Patent no.: US 6,374,295 B2)**.

With respect to **claim 7**, the combined method of Miller and Kramer teaches all the claimed limitations, except that they do not explicitly teach a method of determining a range of IP addresses assigned by a DHCP server, generating a plurality of IP addresses within the range, selecting one of the plurality of IP addresses and determining whether it is in use and assigning the one IP address to said customer's system if the one IP address is not in use.

In the same field of endeavor, Farrow teaches a method of determining a range of IP addresses assigned by a DHCP server (Farrow, col. 1 lines 29-32), generating a plurality of IP addresses within the range (Farrow, col. 34-35), selecting one of the plurality of IP addresses and determining whether it is in use (Farrow, col. 34-36) and assigning the one IP address to said customer's system if the one IP address is not in use (Farrow, col. 1 lines 33-37).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to implement Hibbard and Miller's method for generating a solution with Farrow's method of assigning IP addresses to client systems. A person of ordinary skill in this art would have been motivated to make the modification because DHCP simplifies management by eliminate the need for the network administrator to manually configure the network (Farrow: column 1, lines 26-29).

In regard to **claim 14**, the limitations of this claim are substantially the same as those in claim 7. Therefore the same rationale for rejecting claim 7 is used to reject claim 14. By this rationale **claim 14** is rejected.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Chu et al. (Publication no.: US 2005/0015644 A1) discloses a network connection agents and troubleshooters.

- Marples et al. (publication no.: US 2004/0049714 A1) discloses a method of detecting errant conditions affecting home networks.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Liu whose telephone number is (571) 270-1447.

The examiner can normally be reached on Monday - Friday, 7:30am - 5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

L. Liu
09/12/2007


JASON CARDONE
SUPERVISORY PATENT EXAMINER